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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,472	06/30/2003	Jae-Yong Park	041993-5224	7875

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EXAMINER

QUARTERMAN, KEVIN J

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,472

Applicant(s)

PARK, JAE-YONG

Examiner

Kevin Quarterman

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-21 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and remarks received 07 December 2004 have been entered overcome the objections to the specification and claim 1.

Claim Objections

2. Claim 14 is objected to because of the following informality: It appears that the term "layer" is missing from the end of the 7th line of the claim stating "second electrode on the second insulating ~". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kondo (US 6525704).
5. Regarding independent claim 1, Figure 5 of Kondo shows an organic electroluminescent display device comprising a substrate (30) composed of an array unit and a ground unit; an organic luminescent unit in the array unit and having an organic emitter layer (43), a first electrode (41), and a second electrode (45); a ground line (14) in the ground unit and contacted to the second electrode of the organic

luminescent unit; and an insulating layer (36) exposing a part of the ground line such that the second electrode is directly connected to the ground line.

6. Regarding claim 2, Kondo discloses that the first electrode is an anode electrode (col. 7, ln. 67).

7. Regarding claim 3, Kondo discloses that the second electrode is a cathode electrode (col. 8, ln. 3).

8. Regarding claim 6, Figure 5 of Kondo shows the second electrode contacted to the ground line through a ground contact hole formed at the ground line.

9. Regarding claim 7, Figure 9 of Kondo shows a thin film transistor (15) and a capacitor (62) in the array unit.

10. Regarding claim 8, Figure 5 of Kondo shows the thin film transistor comprising an active layer (31) including source/drain regions and a channel region formed at a middle part thereof; a gate electrode (33); and source (34) and drain (35) electrodes respectively connected to the source and drain regions.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo (US 6525704) in view of Fujita (US 6758538).

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13. Regarding claim 4, Kondo teaches the limitations of independent claim 1, as discussed earlier. Figure 5 of Kondo also shows an electron transport layer (44), an emitting layer (43), and a hole transport layer (42). Kondo fails to exemplify a hole injection layer.

14. Fujita teaches that it is known in the art to provide organic emitting layer of an organic electroluminescent display with an additional hole injection layer for injecting charges from an electrode (col. 5, ln. 61-62).

15. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the organic emitting layer of Kondo with a hole injection layer, as taught by Fujita, for transporting charges between the electrodes for emitting light.

16. Regarding claim 5, Fujita discloses an insulating layer formed of at least one of LiF and LiO₂ (col. 7, ln. 14-15).

Allowable Subject Matter

17. Claims 14-21 are allowed.

18. The following is a statement of reasons for the indication of allowable subject matter: Regarding newly added independent claim 17, the prior art of record neither shows or suggests an organic electroluminescent display device comprising, in addition to other limitations of the claim, an organic luminescent unit having a first electrode under a first insulating layer; an organic emitting layer on both the first electrode and the first insulating layer; a second insulating layer on both the organic emitting layer and the first insulating layer; and a second electrode on the second insulating layer. Due to

their dependency upon independent claim 14, newly added claims 15-21 are also allowable.

Response to Arguments

19. Applicant's arguments filed 07 December 2004 have been fully considered but they are not persuasive.

20. In response to applicant's argument that Kondo does not teach the insulating layer (36) deposited on the organic emitting layer, the Examiner notes that Figure 5 of Kondo shows the insulating layer (36) in contact with the organic emitting layer (42, 43, 44). The Examiner also notes that the term "on" is defined as a function of something being in contact with an outer surface, such as a fly on a ceiling (Merriam-Webster's Collegiate Dictionary, 10th Edition). Thus, the Examiner holds that Figure 5 of Kondo shows the insulating layer deposited on the organic emitting layer, as discussed earlier.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

22. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman
Examiner
Art Unit 2879

kq 
14 March 2005


Joseph Williams
Primary Examiner
Art Unit 2879